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THE DUTY OF THE HOUR.

Being an Examination of the Relation of the Medical Profession to the General Use of Alcoholic Liquors.

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N his work on the descent of man, Mr. Charles Darwin, of blessed memory, remarks that he made in the course of his studies a large collection of the definitions which have been offered as expressing the distinctions between man and the lower animals. The primary object of this collection was to show the insufficiency of such definitions, but unfortunately the learned author abandoned his plan and the list was never published. I have always regretted this because I was anxious to see if any one had been bold enough to sacrifice the honor of the race to its independence, in other words to define the human being as the only animal in which natural passions are abused and unnatural appetites developed. Though it may be a pessimistic view of human nature, yet we cannot avoid the conclusion that the definition is substantially correct. The history of races and nations presents us invariably with a picture of unbridled passions, the fierceness of which is but slowly and uncertainly assuaged by civilization, for in the modern as well as in the ancient world, it is in the centres of intellectual development that the greatest license has been seen. Legislators, both of the civil and ecclesiastical order, have wrestled with these problems, and in some forms of excess have tried every expedient, from the most despotic repression to the most indulgent remonstrance, but with only

partial advantage. Among the vices which appear to be characteristic of man under every climate and social condition, is the use of alcoholic liquors, and although the evils of this indulgence have been vividly presented to every one, yet a determined effort to obliterate the habit belongs only to our own time.

In that almost exhaustive treatise on moral and religious polity, the Jewish and Christian Scriptures, we notice that the duty of total abstinence has not been inculcated either among Hebrews. although the daily duties of life were regulated with microscopic minuteness, or among the leaders of the new dispensation, although they founded a most extended system of asceticism and self-denial. We are concerned, however, with the present, not with the past. Around us is a social system of great complexity. Though progress is slow, yet we need have no fear of its general direction. Each year marks too slight a movement to permit us to distinguish the result, but each century gives us a definitely recognizable advance, and shows clearly the tendency of the race to a higher and purer life. It is the text of my discourse to-night that the basis of this higher morality is self-restraint, and the basis of self-restraint is the influence of example. In the consideration of total abstinence, and the relation of the medical profession to its encouragement, we must clearly distinguish between the use of alcohol as a beverage and as medicine. With the question of its therapeutic indication and contra-indications, we have absolutely nothing to do in this paper. As to the method and form of its clinical use, however, as will be shown later, very important questions arise.

I think I may safely assume that the use of alcohol is not necessary to the maintenance of ordinary health. Its physiological effects have been extensively studied, and concordant results have not always been obtained. I need not stop to reconcile these differences, for the greater portion of the published results is not germane to my subject, nor will it be necessary to devote time to the presentation of statistics. One authority will be sufficient, because it is an authority in whom opportunities of observation and experiment are combined with sound common sense and accurate logic. Without desiring to slight the labors of other workers, I think we find in Parkes' Hygiene the whole subject of alcohol so thoroughly discussed as to render other authority superfluous. In this work it is established beyond

question that the use of alcohol is not beneficial, that it does not increase the power of the system to resist extremes of heat, cold or fatigue, and that even in special cases in which stimulants appear to be needed to maintain the resisting powers, other substances may advantageously be used. It is certainly surprising to read that one of the most common opinions, I would rather say superstitions, about alcohol, that it assists the body in resisting cold, is without foundation. Scarcely any of the minor causes of drinking are more general than this, yet the unanimous testimony of those who have been in charge of polar expeditions is against its beneficial action in such vicissitudes, and some of these leaders have after their first experiences declared that they would not take on any subsequent voyage any person addicted to the use of stimulants. As regards the general effect of the continual use of alcohol on persons in ordinary health I cannot do better than quote briefly from papers read by well-known clinicians, before this Society, two years ago. Dr. Wood says: * "Although I hold that the habitual use of alcohol is to well-fed persons not only unnecessary but positively harmful, it seems to me that in many cases of disease and in those periods of life when by reason of age the body waxes weak, alcohol is found of great value. Under sixty years of age the daily employment of wine may for most persons be very well discountenanced * * * . It is notorious that in America almost every one in reasonable health consumes much more food than the system needs, so that any alcohol taken is added to that which is already in excess." Dr. Pepper holds † that the quantity permissible is very small, not more than one and one-half ounces of absolute alcohol in twenty-four hours, taken much diluted and only at meals. A very large number of persons, either from susceptible stomach or a gouty diathesis, cannot safely take alcohol at all. Dr. Bartholow says: "As a stomachic tonic alcohol is effective only in the case of those not habituated to its use * * * . That in time a catarrhal state of the mucous membrane is produced and a pathological secretion obtained shows the impropriety of the long continued use of alcohol as a stomachic tonic." Finally, although relating to the therapeutical use of

^{*} Is Alcohol a Food. Proceedings Phila. Co. Med. Society, vol. iii, p. 135.

 $[\]dagger$ Effects of the prolonged use of Alcohol on the Nervous System and Organs of Special sense. Op. cit., p. 139.

[‡] Alcohol. Its therapeutical uses internally and externally. Op. cit., p. 127.

alcohol, I cannot avoid quoting some forcible and logical remarks made by Dr. Woodbury* in a discussion on the treatment of pulmonary consumption: "Nothing in clinical medicine is more certain than that the continual use of alcohol in even moderate doses stimulates the development of connective tissue all over the body, nothing in pathology more evident than the fact that alcohol is a prolific source of pulmonary disease, nothing in toxicology better established than the observation of the action exerted by alcohol upon the respiratory centre. For this reason it is especially dangerous in pulmonary consumption."

It is, unfortunately, too true that no quotations from authority or rehearsal of statistics are needed to show the moral and physical injury done by alcohol. Directly and indirectly it is a prime factor in the promotion of disease and crime, and when we reflect upon the thousands of desolated homes and ruined prospects for which this agent is annually responsible, we cannot wonder at the sentiment which is slowly but surely developing in the community against all phases of industry or trade which have for their object the furtherance of the use of alcohol, nor can we doubt that to the success of the work of moral regeneration of our race the obliteration of these industries is essential. A powerful assistance in securing and maintaining sobriety would be to destroy the superstitious respect in which the various beverages are held. Non-medical persons are generally aware that physicians attribute particular values to particular liquors. In my own experience I have found very few persons who are willing to admit that they use liquor merely because they like it. They generally find some other reason—the necessities of the system, the advice of some physician, either to themselves or to some friend. One person uses beer because it is a tonic; another, because of its nutritious value, and so on-every reason but the real one, because they like Not a little of this popularity of liquor is due to the glamour of sentiment which attaches to it. Even the austere psalmist, who, with the exception of a single sin, "did that which is right in the sight of the Lord," has praised the "wine that maketh glad the heart of man." And for ages poets and prose-writers have extolled the qualities of stimulating beverages and the romance of their manufacture. In our time, however, these sentimental

^{*} Proceedings Phila. Co. Med. Society, vol. iv, p. 175,

features are but imaginary. Nothing in the present methods of producing liquors is of a character to make us respect them as types of poetic or convivial relations. The wine that stands on our tables no longer shows in its ruddy color the rainbow tints—

"Caught where the morning sunbeams, stooping low, Have kissed Grenada's plain."

Nor does its aroma repeat

"The dainty perfumes of the East That Horace used to praise."

No, the suggestions that are now called up by those who know the facts, are the suggestions of the fourth floor of a Front street warehouse, where rectified spirit, animal charcoal, glycerine, saponified cottonseed oil, aniline red, burnt sugar, et hoc genus omne, are being mixed together and transferred to casks and bottles ornamented by lying labels. The foaming tankard of malt liquor no longer suggests the

"--- house where nut-brown draughts inspire,"

but the images now appropriate are those of bloated workmen, aloes, quassia, and the hop substitutes, salicylic and boric acid, baking-soda, gum for preserving froth, and beer-pumps for producing it. In short, no romance belongs to our alcoholic beverages. They are the products of influences allied with the lowest levels of mercantile honor, and their touch is corrupting.

In an article read before this Society two years ago,* I put forward the view, that when alcohol is to be used by physicians it should be used as such, and not in the form of special manufacturers. I cannot express myself better than by my words on this occasion, as follows:

"We know that liquors prepared by strictly natural methods are not constant in composition; we know that under the exigencies of trade additional conditions of variations are produced, and even complete substitution brought about. I have for some time thought that the best way to secure entire constancy in the therapeutic use of alcohol would be to have the preparations made up by regular prescription, or by printed formulæ in the Pharmacopæia. The substances which exist in wine, beer or brandy are

^{*}Medical Relations of the Commercial Adulterations of Wines and Liquors. Proceedings Phila. Co. Med. Society, vol. iii, p. 132.

in accidental mixture—some are useful, others useless. Why should we not have the useful articles properly combined by conpetent hands, and the useless omitted. * * * And the physician, instead of ordering a special wine, will simply prescribe such preparations as may be necessary of alcohol, water, flavoring ethers, and astringent or bitter principles." These prescriptions, like those containing other powerful ingredients, should be renewable only at the instance of the physician.

I have lately learned with much pleasure that Dr. A. W. Miller, of this city, a gentleman well known to most of the members of the Society, as an experienced pharmacist, is about to publish a paper advocating a similar view. Dr. Miller indeed expressed such opinion publicly several years ago, although I was not aware of it then. His large experience in the manufacture of flavoring, coloring and other materials used in liquor imitation, gives him the right to speak with authority, and I find by my conversation with him that we are entirely in accord. In his paper he intends to call attention to the fact which I would not have time to consider, that, in wines and brandies, factitious articles are sold at high prices, and thus the practice of ordering such articles exposes patient to both deception and robbery. Not the least of the injuries which is done to the community by the laxity of physicians in reference to the use of liquors, is the encouragement which is thus given to the sale of quack medicines under the guise of bitters and tonics. No greater fraud is put upon the public than the preparations which are advertised under these names. They are alcoholic beverages in their most dangerous and insidious form. I have this week examined one of the most extensively advertised of the lot-Warner's Safe Tonic-and I find it to contain a considerable amount of alcohol, in association with some vile combination of syrup and bitter extract. When it is remembered that the miserable stuff is bought at a price much above its value, and is used mostly by persons already somewhat out of health, we must see that the harm done is incalculable. Yet the popularity of these articles is largely due to the fact that they meet what most people believe to be a necessity in disease, an alcoholic tonic. During the last few years several eminent physicians and chemists in this country and abroad, have gone almost into spasms over a knowledge of such adulterations as the use of alum in bakingpowders, glucose in candy, and oleomargarine in butter, all trifling

and non-injurious substitutions; but we hear very little about the far more dangerous preparations of the class just alluded to. The most striking evidence of the profoundly misguided condition of the public mind on these topics, was well shown lately in New York, when the officers of the Business Men's Moderation Society gravely condemned the use of the harmless glucose in beer, and then gave, inferentially at least, certificates of wholesomeness to beer containing between four and five per cent. of alcohol. The quack medicine mentioned above has with each bottle the official certificate of the Professor of Chemistry of the University of Rochester, stating that the preparation is free from deleterious ingredients. I feel sure that statements like this could not be made if medical authorities were true to their own knowledge on these questions.

It is in view of the points which I have here enumerated, that I feel obliged to lay before this Society, and through its published proceedings before the world, the accusation that the medical profession is responsible for a very large portion of the misery which alcoholic beverages produce, and I declare that the time has now come when a stand should be taken in favor of abstinence. I believe that it is established by the citations I have given, that alcohol is not needed by healthy persons. I know that many non-medical persons use liquor because of the general approval of it by the medical profession, and I think it can be demonstrated that although alcohol itself is a substance of great value, alcoholic beverages are entirely unnecessary. Of late years although physicians have assumed the right to speak broadly upon many questions affecting public health and public morals, they have been singularly conservative as regards the evil of moderate drinking. Yet it seems to me that sewer construction, registry laws, quinine pills, river pollution, ethical innovations, etc., on which topics so much energy has been expended recently, do not approach in magnitude the reform which is here urged.

The pollution of a river water by organic matter before it reaches a city reservoir is rarely so serious in its effects as the pollution of it by alcohol after it leaves the hydrants, and the dangers of Rye Beach, of which we have heard so much, are trifling compared with the dangers of rye whisky or what is labeled as such.

The learned professions are potent influences in moral reform,

and for many centuries law and divinity have exercised much more control over the race than has medical authority. This relation is now rapidly changing. The questions of civilization are regarded as practical problems, largely medical in character, and the direction of education is passing into the control of the scientist and physician. Both the lawyer and divine have recognized alcohol as a foe to public and private virtue, for courts now frequently regard intoxication as an aggravation rather than as an excuse for crime, and the almost unanimous temper of churchmen is against any form of indulgence in stimulants; even the time-honored employment of wine in Communion is not sufficient to maintain its use, and unfermented wine is now a familiar article of commerce. Let us then begin at once to discharge our duties, and ally ourselves openly with the laity, who, though lacking in scientific knowledge, have the good of the community at heart. Let us recognize that while many evils claim our attention, the importance of a firm stand in favor of total abstinence is urgent and is indeed the "duty of the hour."

DISCUSSION ON THE RELATION OF THE MEDICAL PROFESSION TO THE GENERAL USE OF ALCOHOLIC LIQUORS.

The President stated that the points presented for discussion were:

- 1. That the use of alcohol in any form and in any amount by persons in ordinary health is deleterious.
- 2. That the medical profession, by its lax attitude on this question, is responsible for much of the prevailing abuse of alcoholic liquors.
- 3. That if alcohol is to be used at all, it should be given as such, and the prescription should be made non-renewable, as with other powerful medicines.
- Dr. J. T. Eskridge, in opening the discussion by request of the President, said: I like the practical and novel way in which the subject has been treated. It will attract attention, and, I hope, serve to make the members of this Society, and of the medical profession in general, consider their own responsibility for the abuse of alcohol.

One of the conclusions at which the writer of the paper has arrived, is "That the use of alcohol in any form and in any quantity by persons in ordinary health is deleterious." This is a broad and sweeping statement, and, while in the main it is correct, circumstances may arise when alcohol may be administered to persons in health with benefit.

Dr. Percy's experiments showed that the free use of alcohol tends to prevent the solidifiability of fibrin, and thus renders wounds difficult to heal; and those of Vierodt and Prout, that less carbonic acid is given off in the exhalations by the breath under similar conditions. Bouchardat first pointed out that alcohol darkens arterial blood. These results were obtained by experimenting upon subjects whose stomachs had been overcharged with alcohol, or into whose veins the spirit had been directly injected. They show the poisonous effects of alcohol, and reasoning from these, it by no means follows that the administration of small quantities well diluted is injurious to health. But observations are not wanting to prove the evil effects of alcohol on healthy persons when taken in small quantities for a considerable length of time.

Prof. W. B. Carpenter, a strong advocate of temperance, in his admirable prize essay on the "Use of Alcoholic Liquors in Health and Disease," after describing the baneful effects of alcohol on mind and body, when taken in small quantities several times daily for a length of time, frankly admits that its temporary administration to persons in health, on certain extraordinary occasions, is attended with decided benefit. Prof. Miller, of Glasgow, in an excellent review of the subject, entitled "Alcohol: Its Place and Power," arrives at conclusions almost identical with those reached by Prof. Carpenter.

I am satisfied that persons in health, under ordinary circumstances, do not need an alcoholic stimulus, and that if its administration is attended by no good results, evil only follows the use of alcohol at such times; but on the other hand, I am convinced that circumstances do arise when, if alcohol is properly administered to persons in health, its good effects far outweigh its evil; and that there are conditions, short of what we are accustomed to call disease, which are improved by the temporary and judicious employment of alcohol.

Bodily and mental labor that cannot be endured without resorting to artificial stimulants had better be left off; but times come in the history of many persons, when they are not their own task-masters. A great deal may depend upon a few hours' work. Tea and coffee may not be sufficient stimuli, and a little alcohol taken at these times will allow an extra strain being made upon the system. The use of alcohol must not be often repeated for the purpose of increasing the power of endurance. It must be remembered that a stimulus in these cases acts the part of the spur to the tired horse. It probably does not directly add force to the individual, but it enables him to call more upon his latent powers, and, of course, the exhaustion which follows is all the more profound by the reason of the extra strain upon the vital forces, made possible by the use of alcohol.

Again, the appetites of some persons have been rendered capricious by the process of coddling, and those of others lessened, and the power of digestion weakened by worry and over-mental exertion, so that the simplest articles of food cannot be digested properly. To such the administration of a little wine, with a bitter tonic, before meals, for a week or two, and subsequently a bitter tonic given before meals, and wine during or immediately after the ingestion of food, is followed by admirable results. In all these cases the use of alcohol must be cautious and temporary, and not

allowed to be contined longer than is absolutely necessary. I agree with the statement made by the reader of the paper, to-night, that below sixty years of age a person is generally not benefited by the use of alcohol in health. I know, indeed, of a case in which it did not become necessary to resort to it before the ninetieth year.

In regard to the use of alcohol in phthisis, to which a casual reference has been made, I have very strong convictions of its value when properly employed. In this disease, when pulse is rapid and temperature considerably elevated, alcohol is contra-indicated, but in the more chronic cases, when respiration is difficult, and pulse and temperature nearly normal, its beneficial effects in prolonging life are evident to every one who has given it a fair trial. Prof. Flint speaks in the highest terms of alcohol in phthisis.

As a preventive of phthisis, alcoholic stimuli have their place and power. It is well known that in the same family, several children, whose parents have suffered from phthisis, may die from this disease at about the same age. For these persons, if alcohol is occasionally employed judiciously, whenever vital force falls below its normal in them, I have no doubt that in many instances the fatal disease might be prevented.

To the second proposition I may say that I do not know of any case in which the use of alcohol in disease, under direction of a physician, gave rise to drunkenness. Some time ago Dr. Hamilton, in a discussion before this Society, mentioned a case in which a patient became a drunkard in consequence of the use of alcohol in typhoid fever, but it appeared on further inquiry that the man was a habitual drinker before the disease occurred. Lax prescribing, however, may easily become a serious error. It is important that if alcohol is ordered, the quantity, form and time of taking should be indicated. It should be taken only at meals. This periodic and formal use of it will make the patient willing to stop when required. I admit that if we consider that alcohol is injurious in health, we must regard its use in social gatherings, and especially in those composed of medical men, as wrong.

In reference to the last points, I cannot speak from experience. If the adulteration is as extensive as pointed out in the paper, then the author's view, that alcohol should be used as mentioned, is correct. I however, doubt that we can make, extemporaneously, mixtures which will take the place of natural liquors.

Dr. Mills said: I would not wish to be regarded as an advocate of anything else but temperance in the best use of the word, but the question of the influence of the moderate use of alcohol upon intellectuality and the longevity of intellectual workers, is one of considerable interest, from what might be termed a biographical point of view. During the International Medical Congress of 1876, one of the English delegates expressed the opinion, in words which I do not exactly recall, that the intellectual productions of men who did not use alcohol at all were not of a character to indicate the value of abstinence. Many distinguished men who have

lived to a comparatively advanced age—the English Lord Chancellors, German thinkers, and well-known American statesmen, for instance—used alcohol in moderation throughout their lives. I simply introduce this point for discussion. About the evils of the abuse of alcohol no doubt can exist.

Dr. Wood: I consider the first proposition advanced by the author of the paper to be untrue; it is entirely too sweeping. To say alcohol is deleterious in any form and in any quantity in health, is to say that one would be injured by simply smelling a bottle of whisky. I am fully convinced that we do not need alcohol in health, but indulgence in it moderately, on occasions, is probably no more hurtful than over eating. I have seen, at social gatherings, total abstainers, who, while standing apart from the general company and congratulating themselves upon their superior virtue in not indulging in stimulants, gorge themselves beyond repletion with the food set before them, much to their stomachs' distress.

The moral question involved is the old one of use and abuse, and whether I must forego the use of a thing because some one else abuses it.

Are we to abstain from a certain amount of pleasurable indulgence because of the example which that indulgence offers to others? I do not believe in attempting to force total abstinence, because I do not believe that the movement will accomplish the desired result. Not long ago I was traveling in Kansas and I met a prominent prohibitionist, a member of the Central Committee of the State, whom I questioned about the success of the prohibition movement, asking, inter alia, if they had destroyed the grape industry, as the law directed, in the wine-making districts. He replied that they did not expect to do this in those places. Here was an admission of the weakness of the cause, for where the manufacture and use of wine were now most active was the least hope of abolishing it. In the same car was a traveling salesman on the verge of delirium tremens, and I asked him as to the effect of the liquor laws in Kansas. He replied, "I can get a drink of whisky anywhere in Kansas for fifteen cents." The Scandinavian method of dealing with the temperance question seems to me more practicable. In Sweden and Norway the country is divided into district, in each one of which only one tavern is allowed. The licenses are sold at public auction. The temperance people have combined and bought up the licenses. They are obliged to open the tavern, but they can adopt such regulations as will prevent the excessive use of alcoholby those who frequent the place, and also employ all moral means to persuade men not to drink at all. I do not think that the adulterations of liquor are as harmful as has been stated by the lecturer. Liquors and wine are artificial products always.

I think that good l.quo.s can be easily obtained. I do not agree with the proposition that medical men are responsible for the habit of drinking to excess: on the contrary, the example and teaching of the medical profession have done much to diminish the coils of intemperance.

Dr. O'Hara: In reference to the remarks of the last speaker, let me read the following from Richardson, "Induced Diseases of Modern Life," page

232: "Speaking houestly I cannot, by any arguments yet presented to me. admit the alcohols by any sign that should distinguish them from other chemical substances of the paralyzing narcotic class."

If this view be correct, we can have no doubt that alcohol is injurious in health, and that it does not serve as food. We are too much under the ideas of Liebig in this matter. For my part I cannot see that the total abstinence movement is a failure, or that the views advanced in the paper are erroneous. They are the views which have been advocated by high authority, in the International Medical Congress in 1876, and other scientific bodies, for instance. The medical profession may be responsible indirectly for much of the excessive drinking, through the idea scattered, but now passing away, that it was food.

I have myself learned by experience the evils of too much confidence in alcohol, when I thought it was food, and now watch it closely as a medicine. As to the cases narrated by Dr. Eskridge, they cannot be regarded as cases of healthy persons, and the use of alcohol in treatment of them is a question of therapeutics, not of hygiene.

Medical men may certainly accomplish a good deal by the teaching influence of example.

I recall an instance in which brandy was used for dyspepsia; the patient, it is true, got rid of the dyspepsia, but he complained frequently until the day of his death, which was superinduced by liquor, that he made a bad swap and would rather have held on to his dyspepsia.

The conclusions of Dr. Hunt's paper were adopted by the International Medical Congress, 4876, and ordered to be transmitted to the National Temperance Society, the Women's National Christian Temperance Union, and the Friends' Temperance Union of New York. They were:

- 1. Alcohol is not shown to have a definite food value by any of the methods of chemical analysis or physiological investigation.
- 2. Its use as a medicine is chiefly that of a cardiac stimulant, and often admits of substitution.
- 3. As a medicine, it is not well fitted for self-prescription by the laity, and the medical profession is not accountable for such administration or for the enormous evils arising therefrom.
- 4. The purity of alcoholic liquors is, in general, not as well assured as that of articles used for medicines should be. The various mixtures when used as medicines should have a definite and known composition, and should not be interchanged promiscuously.

Dr. Tyson: This question is one very difficult to discuss; both parties are apt to go to extremes. Dr. O'Hara's remarks are a case in point, for the injurious effects to which he alludes are the effects of the use of alcohol in excess and not in moderation. It must have been the experience of all practicing physicians to see many cases which are benefited by the moderate use of alcohol, especially at meals, while in many aged persons its use is very appropriate and even necessary. I am not prepared to deny altogether the correctness of the second proposition offered in the paper.

I think there may be some ground for it, yet I do not know a single case in which the recommendation of the use of alcohol in disease has resulted in establishing a habit of drinking. I recall a case in which a gentleman was advised by a non-medical friend to use whisky for dyspepsia. It was tried, and finding good results from it he continued using it in small amounts daily; the use was kept up until one day the patient found the bottle empty. He missed his usual dose so greatly that he was forced to realize that he had been drinking, and never used the liquor again. It may be laid down as a rule that it is not safe for physicians to advise the regular use of alcohol for dyspepsia; it may lead to a habitual use of stimulants. As to the third point, I think that in view of the fact that it is still possible to get pure wines, especially if we are satisfied with domestic wines, the flavor and other properties which made them more acceptable to the patient, justified their continued use; but I for one am willing to try the effect of pure alcohol properly diluted in cases where alcohol only is indicated.

Dr. Hamilton: Moderate drinking, it must be remembered, is very often the road to immoderate drinking, and therefore the physician, whose influence in this connection is paramount, should sedulously avoid the too frequent and too liberal use of liquor, especially in young subjects. In the low forms of fever, or in chronic, wasting disease, such for instance, as pulmonary consumption, to which allusion has been made, it is often of great advantage, and in the latter disease, where expectoration is profuse, but unaccompanied with much fever or difficulty in breathing, it may prolong life for an indefinite period. The custom of drinking in the wealthy and fashionable circles may still be said to prevail with tyrannic power, and in ordinary social reunions the same practice is common. The influence of wealth and fashion is dominant, and until some amelioration in this connection is manifest, no general temperance reformation need be looked for in the people at large.

The allusion to the adulteration of wines and stronger liquors was deservedly made, but it occurs, doubtless, much more frequently in regard to the finer and more costly than to the cheaper liquors, and the perfection to which this adulteration has attained is simply notorious.

Dr. James C. Wilson: I am much pleased to see this subject before the Society. It is a subject which ought to be agitated, because the agitation will bring out the truth. I think that the propositions rather overstate the case, and somewhat weaken the points advanced. Independently of law, church influence and local politics, a widespread, popular sentiment is developing in favor of temperance, but not of total abstinence. A feeling against excessive indulgence is growing steadily in the community. It is now considered "bad form" to drink to excess at social gatherings, and young men especially are much more restricted than formerly. The three-bottle men of earlier days are now unknown. It is, however, going to an extreme to put the proposition that the use of alcohol in any form, and to any extent, is deleterious. Many persons can use alcohol in moderation, and derive comfort from it without injury. I do not agree with the second

proposition. Respectable medical men are not lax in their attitude on this question, but are accustomed to caution their patients in regard to the dangers of the use of alcohol. Most of them direct the amount to be taken and fix a time for discontinuing the use, just as they do with other powerful drugs. As regards the suggestion to use alcohol alone, it appears to be open to some objections. It is not possible to imitate the different wines. No formula of the pharmacopæia or prescription could produce the perfect mixture which we see in natural wines, which are often so specifically beneficial.

Dr. Frank Woodbury said: I have been much interested while listening to the paper, and, in the main, sympathize with its teachings. I think that the propositions submitted for consideration were purposely framed so as to excite discussion, since they are not logical deductions from the paper, and indeed have not been presented as such. The alcohol question is a complex one-it is a great social and moral problem, as well as a scientific and medical one. The subject as presented this evening has at least three aspects: the use of alcohol in any quantity in health-this is a physiological question; its employment by physicians - a medical question; and the right of physicians to prescribe it-which is a moral question. This moral question is really the principal one of the paper, as is shown by its title, "The Duty of the Hour." With regard to the question as to its injurious effect when used in health in any quantity, I would ask, first, what is meant by a state of health? If a physiological definition is accepted, then no person living under the artificial conditions of civilization can be in a state of perfect health. Ordinary health is merely an approximation towards physiological health; and if the utility of alcohol is acknowledged in the condition of disease (which is merely any departure from the healthy standard), then the first proposition is answered by the lecturer himself in the negative. Then again, concerning the use of alcohol "in any quantity," I think it worth while to recall the fact that not only is it without injurious effect in very small doses, but that in reality the organism cannot escape from imbibing alcohol; it is omnipresent—it is in fresh bread and in ripe fruits, and even traces have been found in the air we breathe, provided there exist a certain amount of organic matter and the conditions of temperature and moisture necessary to fermentation. Even in the muscular tissue and urine of total abstainers, a substance is present chemically indistinguishable from alcohol. In large doses every one admits that is capable of destroying life by its own properties when taken into the system, and it is therefore a poison. Its use in much smaller doses, it must be admitted, may not prove incompatible with the enjoyment of long life and ordinary health; but in many cases its constant use directly induces disease and tends to shorten life. The fact that a substance is a poison, however, is not sufficient in itself to forbid its use in disease, provided that it be given in accordance with the teachings of science and experience. The physician with the longest experience of any present has just expressed his deliberate opinion that it is useful in low conditions of vitality and in slow convalescence.

With regard to the right of the physician to prescribe alcoholic liquors, the moral aspect of the subject, I hesitate to express an opinion, for fear of being misunderstood. I would suggest, at the outset, that in reality the treatment is not so entirely under the control of the physician as is implied by the question. Is it not the fact that it is the patient who employs the medical attendant, and if he is not treated in accordance with his ideas he becomes dissatisfied, loses condiience in his physician and engages another?

A rough illustration may be given: When a Chinaman falls sick, he, as a rule, will, if possible, secure the services of the kind of physician that his parents and friends approve of. A sick Indian in the same way prefers the treatment of his medicine man to that of the most scientific post physician. Is it not also true, that in more cultivated communities, the physician who is called upon in the hour of sickness is the one whose thoughts and prejudices best agree with those of his patients? Patients certainly should not be allowed to dictate in the details of treatment, but their unrelinquished right to approve or reject the general plan of treatment cannot be disputed. It may seem like a humiliating admission, but it is true that in a community where the taverns far exceed the bakeries, total abstinence physicians will have more opponents than clients.

I hope that nothing that I have said will convey the impression that I approve of the use of alcoholic liquors in disease, given merely with a view to gratify the patient; if ordered at all they should be given to obtain the physiological action of ethylic alcohol, which, on account of variation of strength and adulteration in ordinary liquors, may be best given in the form of dilute alcohol in order to secure both purity and exact dosage. This, I have learned, has been largely employed in Bellevue Hospital, where it was introduced by Dr. Gillette; by its use the medical effects of the drug are obtained, and the danger of encouraging the use of ordinary liquors is to a large extent obviated. In conclusion, I wish to express the opinion that the second proposition should be reversed, and it should read: "Physicians deserve great credit for inculcating more correct and scientific ideas with regard to the use of alcoholic liquors by the community." The great advance in the cause of temperance, in my opinion, is very largely due to the teachings of certain prominent physicians and the precepts and example of the great body of the profession.

Dr. Leffmann, in closing the discussion, said: I am dissatisfied with the direction the debate has taken, for too much time has been given to the discussion of the value of alcohol as a remedy, a point which I expressly excluded. While the propositions which I laid down are my convictions, and I believe they will all be ultimately recognized as true, yet I purposely worded them in an extreme form to make the debate more definite. No one, however, is justified in giving to the first proposition the strained meaning that Dr. Wood put upon it, namely, that smelling a bottle of whisky would be held as injurious. The language should be judged according to its intention. The remark quoted by Dr. Mills, in regard to

the literary abilities of total abstainers, is also unworthy of the dignity of the question and is not argument. Dr. Woodbury's suggestion that alcohol must be used because patients expect its use is surely not the true principle of medical practice.' Patients are not to be the judge of anything in treatment. The success of homeopathy and kindred delusions is largely due to the erroneous and absurd view that patients may elect the system of medicine on which they are to be treated. Neither can one regard the fact of the occasional existence of alcohol or alcohol-like bodies in organic matter, in urine or in muscular tissue, or in fresh bread (which latter I doubt very much), as any argument for its use in health as a beverage. Several of the speakers have apparently regarded the paper as declaring the adulteration of liquors to be harmful, but this was not the ground taken. On the contrary, in two papers on alcohol previously read before this Society, and papers read elsewhere, I have pointed out that the adulterations are cheats rather than poisons. It is the uncertainty and deception to which I call attention.

Although objection has been made to the third proposition on the ground that alcohol alone or simply diluted will not answer, yet we have these objections well refuted by the fact just stated by Dr. Woodbury, that in one of the New York hospitals such a preparation is regularly and successfully used.

The second proposition has been misunderstood. It has been taken to mean that the use of alcohol in disease under medical advice has resulted in drunkenness, but this is not the meaning. It is the habit of moderate drinking in health that makes drunkards, and it is to the indifference of the medical profession to this habit that the second proposition relates.

The whole question, it seems to me, is a most important one. The terrible effects of alcohol are seen in all directions, and if the restriction of it is needed -and I do not see how any one can doubt that fact -such restriction must only come by active assistance of those who know the facts best. It will never do to temporize with vice. No method will answer with any form of crime or vice, except continuous, unrelenting opposition. It is a mistake to suppose that widespread and deep-rooted habits are unconquerable. Did time permit, it could be shown that traits of human character, as vicious and deep-rooted as the tendency to drinking, have been eradicated by persistent effort, and what has thus been done can be done again. I am fully of the opinion that the tavern finds its best support in the idea so general in the community that physicians consider the regular use of a little alcohol not injurious. When the medical profession is true to itself, and teaches that alcohol should never be used except for a specific purpose and under continued medical advice, the tavern will lose its best hold on the community.

The statement of Dr. Wood that he is fully convinced that we do not need alcohol in health, and that indulgence in it moderately on occasion is no more hurtful than over-eating, certainly leans in favor of my first proposition.